

Mr. Brad Saunders
Hayes Lemmerz International, Bristol Inc.
51650 Country Road 133
Bristol, IN 46507

Re: 039-11438-00191
First Administrative Amendment to
Part 70 039-6890-00191

Dear Mr. Saunders:

Hayes Lemmerz International, Bristol Inc. (previously known as CMI-Precision Mold, Inc.) was issued a Part 70 permit on July 13, 1999 for operation of an aluminum foundry manufacturing cast and machined aluminum products. A letter requesting approval to incorporate changes to the core making operation was received on October 12, 1999. Since there is no increase in potential to emit criteria pollutants and no new emission units are being installed, the permit is hereby administratively amended as follows, pursuant to the provisions of 326 IAC 2-7-11 (with new language **bolded** and old language ~~struck out~~):

Section A.2(j) of the permit has been revised as follows:

- (j) One (1) core making operation (Unit 200) consisting of five (5) sand silos (**sand silos #1-5**), three (3) sand heaters, four (4) sand mixers, eight (8) core machines, and storage racks, processing sand and resin with a maximum sand process rate of 4.5 tons per hour, with one (1) dust collector (DC-1) **on sand silo #1, sand silo #2, sand silo #3, sand silo #4, and their two (2) associated sand heaters** ~~on sand silos #3 and #4~~ for particulate control which exhausts through one (1) stack (Stack 200a), **one (1) dust collector (DC-12) on sand silo #5 and its associated sand heater for particulate control which exhausts through one stack (Stack 200h)**, and eight (8) acid scrubbers on the core machines for VOC control which exhaust through five (5) stacks (Stacks 200b through 200f);

Section D.3 of the permit has been revised as follows:

Facility Description [326 IAC 2-7-5(15)]

- (j) One (1) core making operation (Unit 200) consisting of five (5) sand silos (**sand silos #1-5**), three (3) sand heaters, four (4) sand mixers, eight (8) core machines, and storage racks, processing sand and resin with a maximum sand process rate of 4.5 tons per hour, with one (1) dust collector (DC-1) **on sand silo #1, sand silo #2, sand silo #3, sand silo #4, and their two (2) associated sand heaters** ~~on sand silos #3 and #4~~ for particulate control which exhausts through one (1) stack (Stack 200a), **one (1) dust collector (DC-12) on sand silo #5 and its associated sand heater for particulate control which exhausts through one stack (Stack 200h)**, and eight (8) acid scrubbers on the core machines for VOC control which exhaust through five (5) stacks (Stacks 200b through 200f); and

Condition D.3.6 of the permit has been revised as follows:

~~The baghouse~~ **Dust Collector (DC-1)** for PM control shall be in operation at all times when **either sand silo #1, sand silo #2, sand silo #3, sand silo #4, or the two (2) associated sand heaters** ~~the sand silos #3 and #4~~ are in operation and exhausting to the outside atmosphere. **Dust collector (DC-12) for PM control shall be in operation at all times when sand silo #5 or its associated heater is in operation and exhausting to the outside atmosphere.** The eight (8) wet scrubbers controlling TEA emissions shall be in operation at all times when the eight (8) core machines are in operation.

Condition D.3.7(a) of the permit has been revised as follows:

- (a) Daily visible emission notations of ~~the baghouse stack exhaust~~ **Dust Collectors DC-1 and DC-12 stack exhausts** shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

Condition D.3.9 of the permit has been revised as follows:

An inspection shall be performed each calendar quarter of all **Dust Collector DC-1 and Dust Collector DC-12** bags controlling ~~sand silos #3 and #4~~ **the five (5) sand silos and three (3) sand heaters** in the core making ~~process~~ **operation** when venting to the outside atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

Condition D.3.11(b) of the permit has been revised as follows:

- (b) To document compliance with Condition D.3.7, the Permittee shall maintain records of daily visible emission notations of ~~the baghouse~~ **Dust Collector DC-1 and Dust Collector DC-12 stack exhausts.**

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter please contact Nishat Hydari, at 973-575-2555 (ext. 3216) or 1-800-451-6027 press 0 and ask for extension 3-6878.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
NH/EVP

cc: File - Elkhart County
U.S. EPA, Region V
Elkhart County Health Department
Air Compliance Section Inspector - Rick Reynolds
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michelle Boner

PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT

**Hayes Lemmerz International, Bristol Inc.
51650 Country Road 133
Bristol, Indiana 46507**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T039-6890-00191	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: July 13, 1999
First Administrative Amendment: 039-11438	Pages Affected: 7, 36, 37, 38, 39
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

- (g) One (1) semi-permanent molding operation (Unit 101) consisting of one (1) semi-permanent turntable and six (6) casting machines with molds sent to a casting monorail, processing aluminum at a maximum rate of 2.0 tons per hour, and exhausting to four (4) roof exhaust fans (Stacks 101a, 101b, 101c, and 101d);
- (h) One (1) semi-permanent molding operation (Unit 102) consisting of one (1) semi-permanent turntable and six (6) casting machines with molds sent to a casting monorail, processing aluminum at a maximum rate of 2.0 tons per hour, and exhausting to four (4) roof exhaust fans (Stacks 102a, 102b, 102c, and 102d);
- (i) One (1) semi-permanent molding operation (Unit 103) consisting of one (1) prototype semi-permanent mold turntable (operation is not necessarily performed on any particular turntable) and six (6) available casting machines (operations are performed on individual casting machines) with molds sent to a casting monorail, processing aluminum at a maximum rate of 0.5 tons per hour, and exhausting to the general plant atmosphere;
- (j) One (1) core making operation (Unit 200) consisting of five (5) sand silos (sand silos #1-5), three (3) sand heaters, four (4) sand mixers, eight (8) core machines, and storage racks, processing sand and resin with a maximum sand process rate of 4.5 tons per hour, with one (1) dust collector (DC-1) on sand silo #1, sand silo #2, sand silo #3, sand silo #4, and their two (2) associated sand heaters for particulate control which exhausts through one (1) stack (Stack 200a), one (1) dust collector (DC-12) on sand silo #5 and its associated sand heater for particulate control which exhausts through one stack (Stack 200h), and eight (8) acid scrubbers on the core machines for VOC control which exhaust through five (5) stacks (Stacks 200b through 200f);
- (k) One (1) prototype core making operation (Unit 210) consisting of one (1) sand silo, one (1) sand mixer, and storage racks, processing sand and resin with a maximum sand process rate of 0.25 tons per hour. This operation is portable and can utilize sand from any of the five sand silos in the core making operation (Unit 200);
- (l) One (1) core removal operation (Unit 230) consisting of a core knockout room with multiple automatic knockout hammers, with a maximum sand throughput of 4.75 tons per hour, exhausting to two (2) stacks (Stacks 230 a-b); and
- (m) One (1) mold blasting room (Unit 350) with a maximum capacity of 31.2 tons of steel molds per hour and 3 tons of blasting material per hour, controlled by a baghouse, with emissions exhausting through one (1) stack (Stack 350).

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; woodworking operations; and specifically the following:
 - (1) One (1) shot blasting operation (Unit 360), consisting of one (1) shot blast machine controlled by one (1) dust collector, with a maximum capacity of

processing 2.16 tons of aluminum castings per hour.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (j) One (1) core making operation (Unit 200) consisting of five (5) sand silos (sand silos #1-5), three (3) sand heaters, four (4) sand mixers, eight (8) core machines, and storage racks, processing sand and resin with a maximum sand process rate of 4.5 tons per hour, with one (1) dust collector (DC-1) on sand silo #1, sand silo #2, sand silo #3, sand silo #4, and their two (2) associated sand heaters for particulate control which exhausts through one (1) stack (Stack 200a), one (1) dust collector (DC-12) on sand silo #5 and its associated sand heater for particulate control which exhausts through one stack (Stack 200h), and eight (8) acid scrubbers on the core machines for VOC control which exhaust through five (5) stacks (Stacks 200b through 200f); and
- (k) One (1) prototype core making operation (Unit 210) consisting of one (1) sand silo, one (1) sand mixer, and storage racks, processing sand and resin with a maximum sand process rate of 0.25 tons per hour. This operation is portable and can utilize sand from any of the five sand silos in the core making operation (Unit 200).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Total VOC usage (not including the triethylamine (TEA) Catalyst) in the core making operation (Unit 200) shall be limited such that fugitive VOC emissions (not including TEA emissions) are limited to less than 40 tons per twelve (12) consecutive month period. Emissions of TEA from the TEA catalyst usage shall be controlled by the eight (8) acid scrubbers and shall not exceed 8.14 tons per year after control. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New Facilities, General Reduction Requirements), the Best Available Control Technology (BACT) for the core making operation (Unit 200) shall be the following:

- (a) The eight (8) sulfuric acid scrubbers controlling the eight (8) core machines will continue to be operated in an efficient manner to control TEA emissions. The scrubbers shall operate at an overall control efficiency of 90.25%. Potential emissions of TEA after control shall not exceed 8.14 tons per year.
- (b) To minimize the other VOC emissions from the core making operation, efficient sand/resin mixing systems will be utilized to minimize overrun wastage and resin use, and controlled measurement techniques will be used to verify that the mixes are maintained within tight limits and excessive binder use will not occur.

D.3.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sand handling and the sand silos in the core making operations (Unit 200) shall not exceed 11.2 pounds per hour when operating at a process weight rate of 9,000 pounds per hour.
- (b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the sand handling and sand silos associated with the prototype core making operation (Unit

210) shall not exceed 1.6 pounds per hour when operating at a process weight rate of 500 pounds per hour.

The above pounds per hour limitations were calculated with the following equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

Compliance Determination Requirements

D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC and PM limits specified in Conditions D.3.1, D.3.2, and D.3.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.3.6 Particulate Matter (PM) and Volatile Organic Compounds (VOC)

Dust Collector (DC-1) for PM control shall be in operation at all times when either sand silo #1, sand silo #2, sand silo #3, sand silo #4, or the two (2) associated sand heaters are in operation and exhausting to the outside atmosphere. Dust collector (DC-12) for PM control shall be in operation at all times when sand silo #5 or its associated heater is in operation and exhausting to the outside atmosphere. The eight (8) wet scrubbers controlling TEA emissions shall be in operation at all times when the eight (8) core machines are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.7 Visible Emissions Notations

- (a) Daily visible emission notations of Dust Collectors DC-1 and DC-12 stack exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.3.8 Parametric Monitoring

The Permittee shall record the pH of the liquid in each of the eight (8) acid scrubbers used in

conjunction with the core machines, at least once daily when the core machines are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pH of the liquid shall be maintained at less than or equal to 5.0 standard units. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pH is greater than the above mentioned range for any one reading.

D.3.9 Baghouse Inspections

An inspection shall be performed each calendar quarter of all Dust Collector DC-1 and Dust Collector DC-12 bags controlling the five (5) sand silos and three (3) sand heaters in the core making operation when venting to the outside atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.3.10 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.11 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain records of the total VOC usage (including the TEA Catalyst) and associated VOC emissions from the core making operation (Unit 200) per month;
- (b) To document compliance with Condition D.3.7, the Permittee shall maintain records of daily visible emission notations of Dust Collector DC-1 and Dust Collector DC-12 stack exhausts.
- (c) To document compliance with Condition D.3.8, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - (A) pH of the liquid in the eight (8) acid scrubbers.
 - (2) Documentation of all response steps implemented, per event .

- (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
- (4) Quality Assurance/Quality Control (QA/QC) procedures or its equivalent.
- (5) Operator standard operating procedures (SOP) or its equivalent.
- (6) Manufacturer's specifications or its equivalent.
- (7) Equipment "troubleshooting" contingency plan.
- (8) Documentation of the dates vents are redirected.
- (d) To document compliance with Condition D.3.9, the Permittee shall maintain records of the results of the inspections required under Condition D.3.9.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.12 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.